

# 2011 Consumer Confidence Report

Water System Name: Shorelands Road and Water Company Report Date: May 27, 2012

*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2011.*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

Type of water source(s) in use: Ground Water

Name & location of source(s): Well#01 (South Side Water Storage Tank#1) Well#02 (West Side Lot 22)  
Well#03 (N.W. corner Lot 17) Well#04 (West Side Lot 30) Well#06 (N. W. Side Lot 29)

Drinking Water Source Assessment information: D.H.S. May, 2003 assessment, no contaminants, but wells considered vulnerable to septic systems. All wells are greater than 150 ft. from septic systems.

Time and place of regularly scheduled board meetings for public participation: Annual meeting Catholic Church Hall 2<sup>nd</sup> Sat. in July 10:00 a.m. Monthly meetings 2<sup>nd</sup> Friday each month. Location rotates among board members.

For more information, contact: Peter Braudrick Phone: (707) 937-1336

## TERMS USED IN THIS REPORT

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Variances and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ND:** not detectable at testing limit

**ppm:** parts per million or milligrams per liter (mg/L)

**ppb:** parts per billion or micrograms per liter (ug/L)

**ppt:** parts per trillion or nanograms per liter (ng/L)

**ppq:** parts per quadrillion or picogram per liter (pg/L)

**pCi/L:** picocuries per liter (a measure of radiation)

**The sources of drinking water** (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring

minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

**Contaminants that may be present in source water include:**

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

**In order to ensure that tap water is safe to drink**, the USEPA and the state Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

**Tables 1, 2, 3, 4, 5, 7, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent.** The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

**TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA**

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	5	0.016	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	5	0.94	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	Well 01 9/27/11 Well 03 9/27/11	42 29	29 - 74			Salt present in the water and is generally naturally occurring

	Well 02	9/3/09	62				
	Well 04	9/3/09	34				
	Well 06	1/30/09	74				
Hardness (ppm)	Well 01	9/27/11	68	36 - 68			Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
	Well 03	9/27/11	41				
	Well 02	9/3/09	50				
	Well 04	9/3/09	61				
	Well 06	1/30/09	36				

\*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

**TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Antimony (ppb) Well 06	1/30/09	2.3		6	20	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb) Well 06	1/30/09	1.9		10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm) Well 06 Well 02 Well 04	9/30/09 9/3/09 9/3/09	0.034 0.008 0.0015	0.0015-0.034	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm) Well 01 Well 06 Well 04	9/27/11 1/30/09 7/29/03	0.11 0.11 0.14	0.11 – 0.14	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nickel (ppb) Well 02 Well 04 Well 06	9/3/09 9/3/09 1/30/09	2.4 1.6 3.0	1.6 – 3.0	100	12	Erosion of natural deposits; discharge from metal factories
Nitrate as NO3 (ppm) Well 01 Well 02 Well 03 Well 04 Well 06	9/27/11 9/27/11 9/27/11 9/27/11 9/27/11	5.1 5.3 13 14 4.9	4.9 - 14	45	45	Runoff and leaching from fertilizer; leaching from septic tanks and sewage; erosion of natural deposits
Gross Alpha Particle Activity (pCi/L) Well 01 Well 02 Well 03 Well 04 Well 06	7/31/07 7/31/07 7/31/07 7/31/07 9/13/10	0.48 0.50 0.92 0.54 1.44	0.48 – 1.44	15	(0)	Erosion of natural deposits
Gross Alpha Counting Error (pCi/L) Well 01 Well 02 Well 03 Well 04 Well 06	7/31/07 7/31/07 7/31/07 7/31/07 9/13/10	0.87 0.83 0.92 0.98 0.49	0.49 – 0.98			

Gross Alpha MDA95 (pCi/L)		Well 01	7/31/07	1.4	0.60 – 1.6			
		Well 02	7/31/07	1.3				
		Well 03	7/31/07	1.3				
		Well 04	7/31/07	1.6				
		Well 06	9/13/10	0.60				
Total Trihalomethanes (ppb)			9/26/11	20.89		80	N/A	Byproduct of drinking water disinfection
Haloacetic acids (ppb)			9/26/11	3.9		60	N/A	Byproduct of drinking water disinfection
Radium 228 (pCi/L)		Well 01	9/29/10	1.93	0.18 – 1.93	5	0.019	Erosion of natural deposits
		Well 02	9/29/10	1.15				
		Well 03	9/29/10	0.18				
		Well 04	9/29/10	0.68				
Radium 228 Counting Error (pCi/L)		Well 01	9/29/10	0.46	0.12 – 0.46			
		Well 02	9/29/10	0.30				
		Well 03	9/29/10	0.12				
		Well 04	9/29/10	0.27				
Radium 228 MDA95 (pCi/L)		Well 01, 02, 03, 04	9/29/10	0.56				
Chlorine (ppm)		Quarterly average	3-31-11	0.5	0.4 – 0.6	4.0	4.0	Drinking water disinfectant added for treatment
			6-30-11	0.6				
			9/30/11	0.5				
			12/31/11	0.4				
Lead (ppb)		Well 02	7/29/03	110*	17* - 110*	(AL=15)	0.2	Internal corrosion of water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits  If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants and young children. Shorelands Road & Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Addition information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791) or at <a href="http://water.epa.gov/drink/info/lead/index.cfm">http://water.epa.gov/drink/info/lead/index.cfm</a>
		Well 04	7/29/03	17*				

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant	
Copper (ppm)	Well 02 Well 04 Well 06	9/3/09 9/3/09 1/30/09	0.26 0.15 0.0046	0.0046 – 0.26	1	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Iron (ppb)	Well 02 Well 04	9/3/09 9/3/09	81 11	11 - 81	300		Leaching from natural deposits; industrial wastes
Manganese (ppb)	Well 06	1/30/09	41		50		Leaching from natural deposits
Zinc (ppm)	Well 02 Well 04 Well 06	9/3/09 9/3/09 1/30/09	0.078 0.033 0.013	0.013 – 0.078	5.0		Runoff/leaching from natural deposits; industrial wastes
Chloride (ppm)	Well 01 Well 02 Well 03 Well 04 Well 06	9/27/11 9/3/09 9/27/11 9/3/09 1/30/09	58 40 56 48 91	40 - 91	500		Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	Well 01 Well 02 Well 03 Well 04 Well 06	9/27/11 9/3/09 9/27/11 9/3/09 1/30/09	7.4 13 13 14 12	7.4 - 14	500		Runoff/leaching from natural deposits; industrial wastes
Foaming Agents (MBAS) (ppb)	Well 02	9/3/09	92		500		Municipal and industrial waste discharges
Turbidity, Lab (ntu)	Well 01 Well 02 Well 03 Well 04 Well 06	9/27/11 9/3/09 9/27/11 9/3/09 7/9/09	0.78 0.18 0.14 0.11 0.81	0.11 – 0.81	5		Soil runoff
Specific Conductance (uS/cm)	Well 01 Well 02 Well 03 Well 04 Well 06	9/27/11 9/3/09 9/27/11 9/3/09 9/27/11	360 420 320 330 310	310 - 420	1600		Substances that form ions when in water; seawater influence
Odor (units)	Well 06	1/30/09	5.1*		3		Naturally-occurring organic materials
PH, Lab (units)	Well 01 Well 02 Well 03 Well 04 Well 06	9/27/11 9/3/09 9/27/11 9/3/09 1/30/09	6.7 6.8 6.7 6.6 7.7	6.6 – 7.7			Acidity, or low pH of drinking water, is usually a result of natural geological conditions. 7.0 indicates the theoretical neutral point.

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
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Potassium (ppm)	Well 02	7/29/03	1.2	1.2 – 1.5		
	Well 04	7/29/03	1.5			
Magnesium (ppm)	Well 01	9/27/11	8.6	4.3 – 8.6		
	Well 02	9/3/09	6.4			
	Well 03	9/27/11	5.0			
	Well 04	9/3/09	7.1			
	Well 06	1/30/09	4.3			
Aggressiveness Index						
	Well 01	9/27/11	10.11	9.68 – 10.95		
	Well 02	9/3/09	10.26			
	Well 03	9/27/11	9.68			
	Well 04	9/3/09	9.77			
	Well 06	1/30/09	10.95			
Total Alkalinity (as CaCO <sub>3</sub> ) (ppm)	Well 01	9/27/11	75	45 - 120		
	Well 02	9/3/09	120			
	Well 03	9/27/11	45			
	Well 04	9/3/09	46			
	Well 06	1/30/09	90			
Boron (ppb)	Well 01	7/29/03	110	91 - 110		
	Well 02	7/29/03	91			
Chromium VI (ppb)	Well 01	7/29/03	0.74	0.27 – 3.9		
	Well 02	7/29/03	0.62			
	Well 03	7/29/03	0.95			
	Well 04	7/29/03	0.27			
	Well 06	1/30/09	3.9			
Bicarbonate (ppm)	Well 01	9/27/11	92	55 - 150		
	Well 02	9/3/09	150			
	Well 03	9/27/11	55			
	Well 04	9/3/09	55			
	Well 06	1/30/09	110			

\*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

### Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).

### Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
N/A				

### For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	0		0	(0)	Human and animal fecal waste
Enterococci	0		TT	n/a	Human and animal fecal waste
Coliphage	0		TT	n/a	Human and animal fecal waste

### Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE	
N/A	
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES	
N/A	

<b>VIOLATION OF GROUND WATER TT</b>				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
<b>None</b>				

### For Systems Providing Surface Water as a Source of Drinking Water

<b>TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES</b>	
Treatment Technique <sup>(a)</sup> (Type of approved filtration technology used)	N/A
Turbidity Performance Standards <sup>(b)</sup> (that must be met through the water treatment process)	Turbidity of the filtered water must: <b>N/A</b> 1 – Be less than or equal to ____ NTU in 95% of measurements in a month. 2 – Not exceed ____ NTU for more than eight consecutive hours. 3 – Not exceed ____ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	N/A
Highest single turbidity measurement during the year	N/A
Number of violations of any surface water treatment requirements	N/A

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

\* Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.

### Summary Information for Violation of a Surface Water TT

<b>VIOLATION OF A SURFACE WATER TT</b>				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
<b>N/A</b>				

### Summary Information for Operating Under a Variance or Exemption




